Bently Nevada 9200-01-01-10-00

01 Moving-Coil Velocity Transducer / system role

Product function and operating context

This execution has a top connector arrangement and a circular M10 x 1 mounting stud; it is intended for a calibrated near-vertical measurement axis.

A properly oriented installation and the receiving instrument load jointly determine the velocity indication. The calibration reference uses a 10 kΩ load at approximately 22 °C and a 100 Hz excitation. A receiver with a different loading characteristic needs an engineering assessment before its scale factor is accepted.

Integration checkpoints

- Establish the casing reference
- Keep the mounting base mechanically rigid
- Trace the passive signal pair
- Compare controlled motion and phase

Self-generating measurement	moving-coil velocity signal without sensor excitation
Measurement location	top connector access for casing or bearing-housing installations
Signal interpretation	absolute housing motion along the calibrated axis

Casing measurements depend on transmission of machine vibration to the mounting point. The sensing path therefore includes the housing structure and mechanical mounting, rather than only the transducer and monitor. A rigid, appropriate bearing-housing position helps preserve the intended amplitude and frequency response.

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02 Technical operating envelope

Sensitivity	20 mV/mm/s (500 mV/in/s), ±5% at calibration conditions
Calibration load	10 kΩ
Frequency response	4.5–1000 Hz, +0/−3 dB typical
Coil resistance	1.25 kΩ ±5%
Locked-coil inductance	125 mH typical

Maximum displacement	2.54 mm peak-to-peak
Calibration orientation	0° ±2.5°
Mounting thread	M10 x 1
Operating temperature	−29 to +121 °C

Values retain their individual conditions and interface boundaries. Technical values apply to 9200-01-01-10-00 with the stated operating conditions. Check supplied revision and the configured installation.

Can a casing measurement from 9200-01-01-10-00 substitute directly for shaft-relative displacement?

No. A casing transducer responds to absolute housing motion, while a proximity system observes shaft motion relative to its mounting. Their physical reference and diagnostic meaning differ.

How can 9200-01-01-10-00 help distinguish wiring polarity from a true phase change?

Pin A becomes positive relative to pin B as case velocity moves toward the connector. Check that convention through the cable and receiver before interpreting phase relationships.

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03 System integration and applications

Bearing-housing velocity

Use the top connector arrangement where access above the transducer and the selected sensing orientation can both be maintained.

Periodic vibration surveys

A compatible portable instrument can receive the passive signal without adding a sensor excitation supply.

Continuous casing monitoring

Connect to an appropriate velocity-monitor input with the required loading and scale.

Mechanical vibration assessment

Evaluate motion at a structurally suitable casing point; this measurement has a different reference from shaft-relative displacement.

System and supply context

The 9200-01-01-10-00 belongs to the Seismoprobe velocity system arrangement with its specified field interfaces.

Application boundary

Applications must satisfy the module or transducer boundary and the actual controller, receiver or target conditions.

How should a low-speed measurement with 9200-01-01-10-00 be assessed?

Check whether the important fault frequencies lie above the selected low-frequency response limit. Motion below that band can be attenuated even when the rotor is moving significantly.

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04 Engineering selection decisions

Why can 9200-01-01-10-00 indicate a different velocity after changing the receiving instrument?

The receiver loads the coil. Compare the new input impedance with the 10 kΩ calibration load before attributing a changed reading to the machine.

What makes mounting orientation important for 9200-01-01-10-00?

Its moving assembly is calibrated near the vertical axis. A mechanically convenient tilt can change the transducer response; preserve the specified orientation instead of compensating with an arbitrary software gain.

Why should a loose bracket be corrected before scaling 9200-01-01-10-00?

Bracket movement changes the mechanical transfer path and may introduce resonance. Correct the mounting and repeat the measurement before changing monitor calibration.

How should an unexpectedly small output from 9200-01-01-10-00 be investigated?

Check motion direction, mounting rigidity, connector continuity and receiver loading. A low output can reflect a poor vibration path or installation error, not necessarily low machine vibration.

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05 Configuration boundary and references

Lifecycle and support

The current production and manufacturer-support stage of 9200-01-01-10-00 is unconfirmed. Replacement planning must preserve the supported system and the supplied hardware execution.

Replacement assessment

Record the bearing-housing position and the direction of expected motion. Compare the mounting axis with the vertical calibration before removing the existing sensor.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; use it together with the applicable manufacturer instructions.

Technical basis

Bently Nevada 9200 and 74712 Seismoprobe Velocity Transducers, 141626 Rev. V.

Related product navigation

- Bently Nevada 330104-00-07-50-02-00
- Bently Nevada 330707-00-20-10-02-00

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries